

# Notice of Allowability

Application No.

10/687,477

Examiner

Cheryl Lewis

Applicant(s)

SCHAEPE ET AL.

Art Unit

2167

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the applicants' communication filed on June 22, 2006.
2. ☒ The allowed claim(s) is/are 1-13 and 18-36, renumbered as claims 1-32.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-13 and 18-36 are allowed.
2. Claims 14-17 was cancelled in the amendment received on June 22, 2006.

### EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in an interview with Darien Wallace on September 13, 2006.

4. Claims 1, 18, 30, and 31 have been amended as follows:

1. (Currently Amended) A computer-implemented method for extracting information from digital image data comprised of semantic units, comprising:

- (a) defining a data object network by selecting a plurality of semantic units from said digital image data, wherein a semantic cognition network comprises said data object network, a class object network and a processing object network, wherein said class object network comprises categories of classifications of said selected semantic units, wherein said semantic cognition network is implemented on a distributed network of computers and uses a set of algorithms to process said selected semantic units;

(b) defining a processing object in said processing object network by selecting a data domain in said data object network, a class domain in said class object network and an algorithm from said set of algorithms, wherein said processing object comprises said data domain, said class domain and said algorithm; and

(c) processing said selected semantic units in said processing object network using said processing object, wherein said processing said selected semantic units is used to display a picture region from the digital image data, and wherein the picture region includes semantic units from said data object network that fall within a classification of said class object network.

18. (Currently Amended) A computer-implemented system for extracting information from input data, comprising:

mapping means for mapping said input data into a data object network, wherein said input data comprises semantic units, wherein a semantic cognition network comprises said data object network, a class object network and a processing object network, wherein said class object network comprises categories of classifications of said semantic units, and wherein said semantic cognition network uses a set of algorithms to process said semantic units, ~~and wherein said semantic cognition network is implemented on a computer;~~

defining means for defining a processing object in said processing object network by selecting a data domain in said data object network, a class domain in said

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class object network and an algorithm from said set of algorithms, said processing object comprising said data domain, said class domain and said algorithm; ~~and~~

processing means for processing said semantic units in said processing object network using said processing object; and

display means for displaying a picture region, wherein said picture region is generated using semantic units from said data object network that fall within a classification of said class object network.

30. (Currently Amended) A system implemented on a computer for extracting knowledge comprising:

a data object network;

a class object network, wherein semantic units are networked to each other in each of said data object network and said class unit network, wherein said semantic units comprise digital image data;

defining means for defining a processing unit by selecting a data domain in said data object network, a class domain in said class object network and an algorithm from a set of algorithms, each of which being part of said processing unit; ~~and~~

processing means for processing said semantic units in accordance with said data domain, said class domain and said algorithm; and

display means for displaying a picture region, wherein said picture region is generated using semantic units processed in accordance with said data domain.

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31. (Currently Amended) A computer-implemented system for extracting information from digital image data, comprising:

a data object network having a data domain, said data object network receiving said digital image data;

a class object network having a class domain;~~and~~

a processing object network having a processing object, wherein a semantic cognition network comprises said data object network, said class object network and said processing object network, wherein said semantic cognition network uses a set of algorithms to process said digital image data, wherein said processing object comprises said data domain, said class domain and an algorithm from said set of algorithms, wherein said processing object network processes said semantic units using said processing object;~~and wherein said semantic cognition network is implemented on a computer; and~~

a display on which a region of a digital image is marked to show part of said digital image data that comprises said semantic units processed using said processing object.

5. The following changes to the drawings have been approved by the examiner and agreed upon by applicant: The examiner has amended drawing figures 1 and 2 to illustrate that a box has been drawn around the entire figure and elements of figures 1 and 2. The illustration indicates that the box is needed to show these individual figures as one entity and not a partial view of a figure entity (37 CFR 1.84(h)). In order to avoid

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abandonment of the application, applicant must make these above agreed upon drawing changes.

### **REASONS FOR ALLOWANCE**

6. The following is a statement of reasons for the indication of allowable subject matter:

Applicants' response filed on June 22, 2006 overcomes the prior art rejection under 35 USC § 102(e) by Bergan.

The prior art of record does not render obvious to one ordinarily skilled in the art at the time of applicant's invention nor anticipate the combination of claimed elements including 'wherein said processing said selected semantic units is used to display a picture region from the digital image data, and wherein the picture region includes semantic units from said data object network that fall within a classification of said class object network' as recited in independent claim 1 and similarly recited in independent claims 18, 30, and 31.

The remaining claims, 2-13, 19-29, and 32-36 are dependent claims, thus these claims are patently distinct over the art of record for at least the above reasons.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **NAME OF CONTACT**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Lewis whose telephone number is (571) 272-4113. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

(571) 273-4113 (Use this FAX #, only after approval by Examiner, for "INFORMAL" or "DRAFT" communication. Examiners may request that a formal paper/amendment be faxed directly to them on occasions.).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/ Technology Center (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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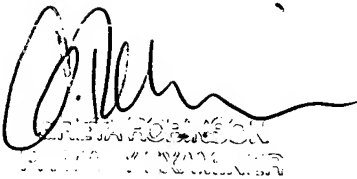
For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Cheryl Lewis". The signature is fluid and cursive, with the first name "Cheryl" being more prominent than the last name "Lewis".

Cheryl Lewis  
Patent Examiner  
September 13, 2006

A second handwritten signature in black ink, identical to the one above, appearing to read "Cheryl Lewis". It is also fluid and cursive.



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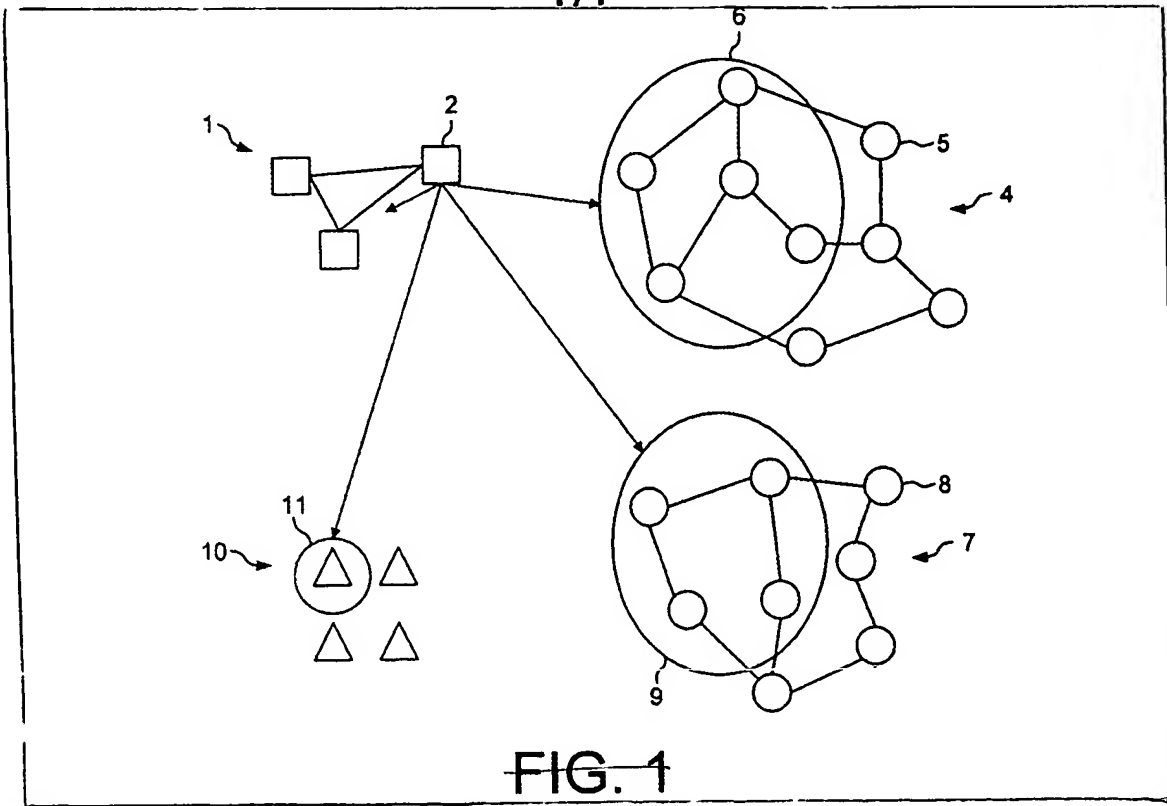


FIG. 1

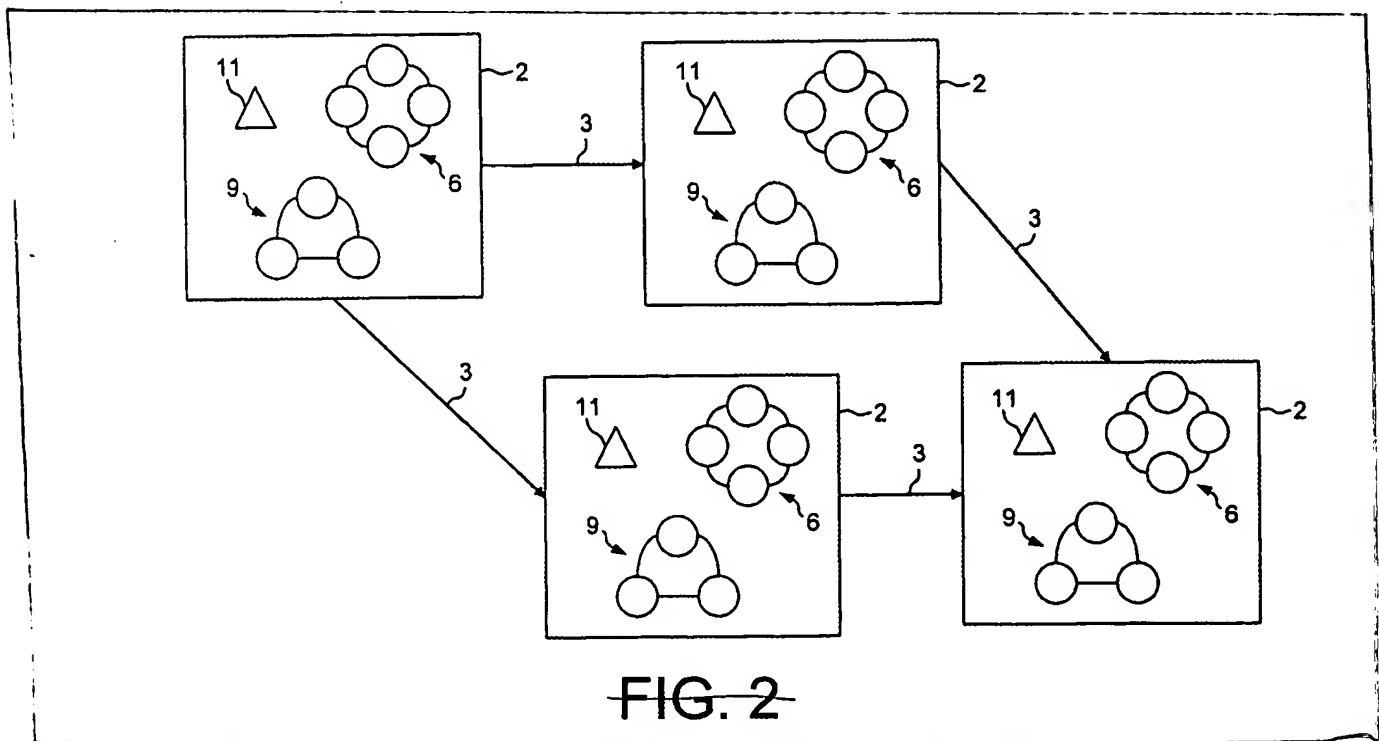


FIG. 2